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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 1331-301 09/494,242 01/31/2000 Reid W. Von Borstel 3187 23117 09/25/2003 7590 NIXON & VANDERHYE, PC EXAMINER 1100 N GLEBE ROAD OWENS JR, HOWARD V 8TH FLOOR ARLINGTON, VA 22201-4714 ART UNIT PAPER NUMBER

> 1623 DATE MAILED: 09/25/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/494,242	VON BORSTEL ET AL.
	Examiner	Art Unit
	Howard V Owens	1623
The MAILING DATE of this communication appears on the c ver sheet with the c rresp ndence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status	,	
1) Responsive to communication(s) filed on 03 J		,
	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims		
	in.	· ·
<ul> <li>4) ☐ Claim(s) 48-63 is/are pending in the application.</li> <li>4a) Of the above claim(s) 56-63 is/are withdrawn from consideration.</li> </ul>		
* <u> </u>	IT ITOTT CONSIDERATION.	8
5)  Claim(s) <u>48-55</u> is/are allowed.	*	•
6)⊠ Claim(s) is/are rejected.		(i)
7) Claim(s) is/are objected to.		χ · · · · · · · · · · · · · · · · · · ·
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers		
9) The specification is objected to by the Examine	Ø)	
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in rep		
12) The oath or declaration is objected to by the Ex		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign	n priority under 35 H.S.C. 8 119/a	)-(d) or (f)
a) All b) Some * c) None of:	i priority drider do 0.0.0. 3 1 rold	, (a), 3. (i).
1. Certified copies of the priority document	s have been received	•
		on No
	•	1
<ul> <li>3. Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received.		
15) Acknowledgment is made of a claim for domest		The state of the s
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)

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#### **DETAILED ACTION**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

## Response to Election

Claims 56-63 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 13. An action on the merits of claims 48-55 is set forth below.

#### Reference to Continuing Applications

This application lacks the necessary reference to the prior application. A statement reading "This is a Continuation of application Serial No. 08/153,163, filed 11/17/1993, now U.S. Patent 6,020,320......" should be entered following the title of the invention or as the first sentence of the specification. Also, the present status of all parent applications should be included.

### Claim Objections

For clarity, the structures set forth in the claims representing the 2'deoxypurines and pyrimidines should be resubmitted with a clear depiction of the intended atoms or substitutents. The structures contain bold overlapping fonts which make it hard to

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discern whether an oxygen or a carbon was intended; moreover it is hard to discern hydrogen atoms from nitrogen atoms.

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 48-55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,020,320.

Claims 48-55 are drawn to a method of enhancing the delivery of exogenous deoxyribonucleosides to the tissue of an animal comprising administering to an animal in need thereof an effective amount of acylated 2' composition comprising 2'-deoxycytidine, 2'-deoxyguanosine, 2'-deoxyguanosine and 2'-deoxycytidine.

Claim 7 of '320 is drawn to a method for enhancing the healing of diseased or damaged liver tissue comprising administering to an animal in need thereof an effective amount of acylated 2' composition comprising 2'-deoxycytidine, 2'-deoxyguanosine, 2'-deoxyadenosine and 2'-deoxycytidine.

The instant claims differ from '320 in that a specific tissue is not cited for healing in the instant claims. However, '320 teaches that acyl derivatives are less susceptible to degradation of the nucleoside moiety by enzymes in plasma and non-target tissue and that compositions containing acyl derivatives of nucleosides can be used to provide

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optimum bioavailability (columns 17-20). Thus one of skill in the art would have been motivated to use the acylated nucleosides to enhance delivery to not only liver tissue, but tissue generally requiring administration or treatment given the benefits of bioavailability and less susceptibility to degradation.

This application is in condition for allowance except for the following formal matters:

- 1. Submission of a terminal disclaimer over U.S. Patent No. 6,020,320 to obviate the non-statutory double patenting rejection set forth herein.
- 2. Submission of amended claims to overcome the claim objection set forth herein.
  - 3. Cancellation of non-elected claims 56-63.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Howard V. Owens Patent Examiner Art Unit 1623

James O. Wilson

Supervisory Patent Examiner Technology Center 1600

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538. The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Supervisory Patent Examiner signing this action, James O. Wilson can be reached on (703) 308-4624. The fax phone number for this Group is (703) 308-4556.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.